

April 16, 1965

Dr. S. H. Eisman
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Philadelphia, Pennsylvania 19137

Dear Dr. Eisman:

Professor Polya has called my attention to the paper by Jordan which discusses both kinds of center of a tree. My discussions, following Henze and Blair, have concerned his "center" (p. 187), which can be thought of as a center of mass, and your remarks called attention to his "centre de seconde espece" (p. 189), which divides the diameter. He also anticipates the mapping of linear chains on single edges of a graph.

As for the utility of the diameter, I could not improve on your appraisal. It conforms more closely to conventional nomenclature, but would be very difficult to manipulate to find all the isomers of a given mass. It might play a useful role in finding all the homologues derived from a skeleton with a given diameter.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

Reference: Jordan, C. (1869). Sur les assemblages des lignes.
J. rein. angew. Math., 70:185-190.

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